# Rose Z. Abramoff

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## **EDUCATION & EXPERIENCE**

## **Lawrence Berkeley National Laboratory**

June 2015-present

Postdoctoral Fellow, Climate Sciences Department Advisors: Dr. Margaret S. Torn, Dr. William J. Riley

Boston University September 2009 - May 2015

Ph.D., Department of Biology Certificate in Terrestrial Biogeoscience

Advisor: Professor Adrien C. Finzi

Amherst College September 2005 - May 2009

B.A., Department of Biology

B.A., Department of Theater and Dance

Advisors: Professor David Ratner, Professor Wendy Woodson

### TEACHING EXPERIENCE

Pomona College May 2013- May 2014

Undergraduate thesis advisor: Johanna Recalde

Harvard Forest REU Program May 2013-August 2013, June 2012- August 2012

Mentor: Samuel Knapp, Arline Gould, Johanna Recalde

Boston University Sep 2012-Present, Sep 2010- May 2011

Teaching Fellow: Biology I, Biology II, Ecology

Finzi Lab Jan 2011- August 2012

Undergraduate Research Intern Mentor: Amanda Alon, Aubree Woods

NSF GK-12 GLACIER June 2011- June 2012

Teaching Fellow: Curley K-8 School

#### OUTREACH

- Bay Area Scientists in Schools, Member (2015-present)
- Advocates for Literacy in Environmental Sciences, Founding Member (2013)
- Pierce School Climate Change Summit, Moderator (2012)
- Curley K-8 School Science Fair, Judge (2012)
- NSF GK-12 GLACIER Fundraiser, Lead Organizer (2011)
- Summer Pathways Program: Tech Savvy, Program Coordinator (2011)
- Biology Inquiry & Outreach within Boston University Graduate Students, Student Teacher (2011)

### PROFESSIONAL SERVICE

- Berkeley Lab Postdoc Association: Science in Schools liason (July 2016 present)
- Women Scientists and Engineers Council Empowerment Committee (July 2016present)
- BASIS Steering Committee Member (June 2016-present)
- Organizer, International Decade of Soil Workshop (March 2016)
- Contributor, Soil carbon vulnerability and resilience: Reviewing and advancing the science toward improved decisions (doi:10.1029/2016EO056881)
- AGU Global Environmental Change Executive Committee Member (2015-present)
- LTER Higher Education Working Group Member (2013-2015)
- Harvard Forest Graduate Student Representative (2013-2015)
- BU Biogeosciences Program Digital Media Committee Member (2014-2015)
- BU Biogeosciences Program Outreach Committee Member (2014-2015)
- Ecological Society of America Member (2012-present)
- American Geophysical Union Member (2012-present)

#### **REVIEWER**

- Global Change Biology
- New Phytologist
- Biogeosciences
- Biological Conservation
- Ecosystems
- Biotropica
- Ecology and Evolution

#### AWARDS

- Boston University Dean's Fellowship (2009)
- NSF EAPSI Fellowship Japan (2010)
- Amherst College Fellowship for Graduate Study: Forris Jewett Moore Fellowship (2009-2011)
- NSF GK-12 GLACIER Fellowship (2011)

- Boston University Biogeosciences Fellowship Research Award (2013)
- Boston University Teaching Fellowship (2010, 2012, 2013)
- American Geophysical Union Outstanding Student Paper Award (2013)
- Department of Energy Student Travel Fellowship (2014)
- George R. Bernard, Jr. Travel Award (2012, 2013, 2014)
- American Association of University Women Dissertation Fellowship (2014)
- American Geophysical Union Student Travel Grant Award (2012, 2014)
- Boston University Biogeoscience Symposium Outstanding Oral Presentation Award (2015)

### **SKILLS**

- Computer: Git/Mercurial, R, Matlab, FORTRAN 90/95, SAS, SPSS, JMP, STELLA, ArcGIS, RootFly, ImageJ/Fiji, SigmaPlot, Unix/Linux
- General: root viewing box and minirhizotron tube design and installation

### **PUBLICATIONS**

Abramoff RZ, Finzi AC (2016) Seasonality and partitioning of root allocation to rhizosphere soils in a mid-latitude forest. *Ecosphere*. **7.11**, e01547. DOI:10.1002/ecs2.1547.

Abramoff RZ, Finzi AC (2016) Phenology and Carbon Allocation of Roots at Harvard Forest 2011-2013. *Long Term Ecological Research Network*. Dataset. DOI:10.6073/pasta/b2fe6d68f23ad815f62a022826028328

Finzi AC, Abramoff RZ, Darby BA, Spiller KS, Brzostek ER, Phillips RP (2015) Rhizosphere processes are quantitatively important components of terrestrial carbon and nutrient cycles. *Global Change Biology.* **21.5**, 2082-2094.

Abramoff RZ, Finzi AC (2015) Are above-and below-ground phenology in sync? *New Phytologist*, **205.3**, 1054-1061.

Abramoff RZ, Hirota G, Kobori H, Taguchi M (2010) Abundance of dragonfly species and their habitat preferences in urban restored ponds in Yokohama. *The 6<sup>th</sup> International Workshop on Sustainable Asia.* (conference proceeding)

### In Progress

Abramoff RZ, Tang J, Georgiou K, Torn MS, Riley WJ. Minerals control soil decomposition and organic carbon accumulation over decadal timescales: A modeling analysis. *Global Change Biology.* (*in prep*)

Abramoff RZ, Xu X, Hartmann M, O'Brien S, Feng W, Davidson EA, Finzi AC, Moorhead D, Schimel J, Mayes M. The Millennial model: in search of measurable pools and exchanges in soil carbon cycling for the new century. *Biogeochemistry*. (in prep)

Abramoff RZ, Davidson EA, Finzi AC. A parsimonious modular approach to building a mechanistic belowground carbon and nitrogen model. *Soil Biology and Biochemistry*. (*in prep*)

Savage K, Davidson EA, Abramoff RZ, Finzi AC, Giasson M-A. Partitioning soil respiration: Quantifying the artifacts of the trenching method. (*in prep*)

Abramoff RZ, Georgiou K, Riley WJ, Torn MS. Effects of substrate stoichiometry on microbial carbon use efficiency. (*in prep*)

### **SELECTED PRESENTATIONS**

Long Term Ecological Research All Scientists' Meeting (2012), September – <u>Poster: Phenology</u> of belowground carbon allocation in a mid-latitude forest

American Geophysical Union (2013), December – <u>Presentation: Root Phenology at Harvard</u> Forest and Beyond

Northeast Natural History Conference (2014), April – <u>Invited Presentation: Linking above</u> and belowground phenology at Harvard Forest and beyond

Department of Energy Terrestrial Ecosystem Science PI Meeting (2014), May – <u>Poster:</u> <u>Seasonality of carbon allocation to roots in a mid-latitude forest</u>

Ecological Society of America Annual Meeting (2014), August – Presentation (Organized Session): What is the relationship between aboveground and belowground phenology? A meta-analysis and case study

American Geophysical Union Fall Meeting (2014), December – <u>Invited Presentation: A</u>

Parsimonious Modular Approach to Building a Mechanistic Belowground C and N Model

Harvard Forest Ecology Symposium (2015), March – <u>Invited presentation: The secret lives of roots: Seasonality and partitioning of belowground C to three Harvard Forest stands</u>

American Geophysical Union Fall Meeting (2015), December – <u>Poster: Effects of substrate</u> <u>stoichiometry on microbial carbon use efficiency</u>

Department of Energy Terrestrial Ecosystem Science PI Meeting (2016), April – <u>Poster:</u> <u>Minerals control soil decomposition and organic carbon accumulation over decadal timescales: A modeling analysis</u>

Department of Energy Terrestrial Ecosystem Science PI Meeting (2016), April – <u>Poster:</u> International Decade of Soil Workshop: Soil Carbon Vulnerability and Resilience